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10/711,611	09/28/2004	Tatsuya Kawakami	SIC-04-032	5610
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DELAND LAW OFFICE			LUONG, VINH	
P.O. BOX 69			ART UNIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

bdeland1992@gmail.com
jdeland@sisqtel.net

Office Action Summary	Application No. 10/711,611	Applicant(s) KAWAKAMI, TATSUYA	
	Examiner Vinh T. Luong	Art Unit 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-21,23,24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The amendment filed on August 6, 2009 has been entered.
2. The restriction and Applicant's election of the species of FIGS. 5-6B without traverse in the reply filed on January 16, 2008 in parent application are carried over to the instant RCE. See MPEP § 819.
3. Claim 22 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 16, 2008.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1, 3-21, 23, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Troiano (US 6,105,459).

Claim 1

Troiano teaches an apparatus comprising:

a first engaging member 32;

a movable second engaging member 20;

wherein the first engaging member 32 engages the second engaging member 20; and

a biasing mechanism 45, 46, 48, 52, 54 (c. 3, ll. 1-14) that applies a biasing force to bias the first engaging member 32 at a first biasing location (e.g., FIG. 4, i.e., a high tension, applied position, c. 2, ll. 3-5) on the first engaging member 32 so that the first engaging member 32 engages the second engaging member 20;

wherein, while the first engaging member 32 engages the second engaging member 20 and the second engaging member 20 moves, the biasing mechanism 45, 46, 48, 52, 54 is capable

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of changing the location of the application of the biasing force from the first biasing location (e.g., FIG. 4) on the first engaging member 32 to a different second biasing location (e.g., FIG. 3, i.e., a low tension, released position, c. 1, l. 66 – c. 2, l. 2) on the first engaging member 32 so that an engaging force applied between the first engaging member 32 and the second engaging member 20 when the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the second biasing location (e.g., FIG. 3) is less than the engaging force applied between the first engaging member 32 and the second engaging member 20 when the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the first biasing location.

Claim 1 and other claims below are anticipated by Troiano because Troiano teaches each and every positively claimed element in the claim and inherently or is capable of performing the claimed function. Troiano, c. 3, l. 15 - c. 4, l. 9, and claims 1-3. In fact, e.g., by comparing Applicant's FIG. 5 and Troiano's FIGS. 2-5, Troiano's cam 48 slides (changes the location) on Troiano's first engaging member 32 in the same manner as Applicant's interface member 212 that slides (changes the location) on Applicant's first engaging member 41, and Troiano's spring 45 biases Troiano's cam 48 in the same manner as Applicant's spring 208 that biases Applicant's interface member 212.

In addition, as noted, a recitation of the intended use of the claimed invention ("for reducing an engaging force of an engaging member for a bicycle component") must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then, it meets the claim. *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). On the

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other hand, it is well settled that the claims drawn to an apparatus must distinguish from prior art in terms of structure rather than function. *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997); *In re Danly*, 120 USPQ 528 (CCPA 1959); *Ex parte Masham*, 2 USPQ2d 1647 (BPAI 1987) and MPEP § 2114. Moreover, the “wherein” or “whereby” clause that merely states the inherent results of limitations in the claim adds nothing to the claim’s patentability or substance. *Texas Instruments Inc. v. International Trade Commission*, 26 USPQ2d 1018 (Fed. Cir. 1993); *Griffin v. Bertina*, 62 USPQ2d 1431 (Fed. Cir. 2002); and *Amazon.com Inc. v. Barnesandnoble.com Inc.*, 57 USPQ2d 1747 (Fed. Cir. 2001).

Claim 3

The second engaging member 20 comprises a positioning unit 20. Referring the second engaging member to a merely inferentially included element or an intended use element, such as, a bicycle shift control device is not accorded patentable weight.

Claim 4

The first engaging member 32 comprises a positioning member 32 that engages the positioning unit 20 to maintain the positioning unit 20 in a selected position.

Claim 5

The biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the positioning member 32.

Claim 6

The positioning member 32 and the biasing mechanism 45, 46, 48, 52, 54 moves relative to the other to reduce the biasing force when the positioning unit 20 moves. Troiano, c. 3, l. 15 - c. 4, l. 9.

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Claim 7

The positioning member 32 moves or is capable of moving in response to movement of the positioning unit 20.

Claim 8

The positioning member 32 moves or is capable of moving relative to the biasing mechanism 45, 46, 48, 52, 54 when the positioning unit 20 moves so that the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the different biasing location.

Claim 9

The positioning member 32 moves or is capable of moving together with the positioning unit 20 when the positioning unit 20 moves.

Claim 10

The movement of the positioning member 32 causes the biasing mechanism 45, 46, 48, 52, 54 to apply the biasing force to the different biasing location.

Claim 11

The positioning unit 20 comprises a plurality of positioning teeth 30, and wherein the positioning member 32 comprises a positioning pawl 32 that engages selected ones of the plurality of positioning teeth 30 to maintain the positioning unit 20 in the selected position.

Claim 12

The positioning unit 20 and the positioning pawl 32 move relative to each other so that the positioning pawl 32 moves over at least one of the plurality of positioning teeth 30, and wherein the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the different

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second biasing location so that the biasing force is reduced when the positioning member 32 moves over the at least one of the plurality of positioning teeth 30.

Claim 13

The biasing mechanism 45, 46, 48, 52, 54 increases or is capable of increasing the biasing force to the positioning member 32 after the positioning member 32 moves over the at least one of the plurality of positioning teeth 30.

Claim 14

The biasing mechanism 45, 46, 48, 52, 54 applies or is capable of applying the biasing force to substantially the same biasing location before and after the positioning member 32 moves over the at least one of the plurality of positioning teeth 30.

Claim 15

The positioning pawl 32 moves or is capable of moving relative to the biasing mechanism 45, 46, 48, 52, 54 when the positioning unit 20 moves so that the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the different second biasing location.

Claim 16

The positioning pawl 32 moves or is capable of moving together with the positioning unit 20 when the positioning unit 20 moves.

Claim 17

The movement of the positioning member 32 inherently causes the biasing mechanism 45, 46, 48, 52, 54 to apply the biasing force to the different second biasing location.

Claim 18

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A mounting member 24 supports the positioning unit 20 and the positioning pawl 32, and wherein the biasing mechanism 45, 46, 48, 52, 54 is secured relative to the mounting member 24.

Claim 19

The positioning unit 20 rotates/is capable of rotating to move the positioning pawl 32.

Claim 20

The biasing mechanism 45, 46, 48, 52, 54 comprises a spring 45.

Claim 21

The biasing mechanism 45, 46, 48, 52, 54 comprises a coil spring 45.

Claim 23

The movement of the second engaging member 20 is capable of causing the biasing mechanism 45, 46, 48, 52, 54 to reduce the biasing force applied to the first engaging member 32. *Texas Instruments Inc. v. International Trade Commission; supra.*

Claim 24

The biasing force applied by the biasing mechanism 45, 46, 48, 52, 54 is capable of changing from a first value to a second value while the second engaging member 20 is moving and the first engaging member 32 is contacting the second engaging member 20. *Texas Instruments Inc. v. International Trade Commission; supra.*

Claim 26

The positioning member 32 moves around a rotational axis 26 of the positioning unit 20 (by a lost motion linkage 31 and 36).

6. Claims 1, 3-21, 23, 24, and 26 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Troiano.

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Claims 1, 3-21, 23, 24, and 26

Assuming *arguendo* that Troiano does not teach the functional limitations set forth in “wherein” clause of claim 1.

As evidenced from Troiano’s FIGS. 2-5, Troiano’s biasing mechanism 45, 46, 48, 52, 54 engages Troiano's first engaging member 32 at first and second biasing locations, consequently, the biasing mechanism 45, 46, 48, 52, 54 applies different biasing forces on the first engaging member at the instant first and second locations, and consequently, creates different engaging forces. Among the different biasing forces, one obviously can try to select the different biasing forces such that an engaging force applied between the first engaging member and the second engaging member is less than the engaging force applied between the first engaging member and the second engaging member when the biasing mechanism 45, 46, 48, 52, 54 applies the biasing force to the first biasing location. The modification of Troiano’s apparatus by selecting the biasing forces in order to have engagement forces as claimed would not have been uniquely challenging to a person of ordinary skill in the art because it is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement" *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) and it “does no more than yield predictable results.” *KSR* at 1739. See also example (E) “Obvious to try” in MPEP 2143 and *Ball Aerosol and Specialty Container Inc. v. Limited Brands Inc.*, Fed. Cir., No. 2008-1333, 2/9/2009.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Ferenc et al. (FIGS. 2 and 3).

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8. Applicant's arguments filed August 6, 2009 have been fully considered but they are not persuasive.

The rejections under 35 USC 102(b) and 103 based on Hiura or Liu are withdrawn in view of Applicant's amendments to the claims. Applicant's arguments with respect to claims 1, 3-21, 23, 24, and 26 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment (*e.g., changes* the location of the application of the biasing force in claim 1) necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday - Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinh T Luong/
Primary Examiner, Art Unit 3656